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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,684	01/30/2004	Sergio P. Bonilla	SJO920030093US1	9136
46917 7590 09/23/2008 KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212				
EXAMINER HARPER, LEON JONATHAN				
ART UNIT		PAPER NUMBER		
2166				
NOTIFICATION DATE		DELIVERY MODE		
09/23/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

krvuspto@ipmatters.com

### Office Action Summary

**Application No.**

10/769,684

**Applicant(s)**

BONILLA ET AL.

**Examiner**

Leon J. Harper

**Art Unit**

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-16, 18-20 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-16, 18-20 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/15/2008 has been entered. Claims 11-16 have been amended. Accordingly, claims 11-16, 18-20 and 34 are pending in this office action.

### ***Response to Arguments***

Applicant's arguments with respect to claims 11-16, 18-20 and 34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11-16, 18-20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delphi 4 Unleashed Chapter 3 (hereinafter Polymorphism)(art of record) in view of US 7165104 (hereinafter Wang).

As for claim 1 Polymorphism discloses: receiving a request implemented via at least one device independent class (See page 4 lines 22-25 note: "DrawIt" this method is called without respect to child class); traversing a class hierarchy database to determine at least one device specific class that corresponds to the at least one device independent class (See page 4 lines 21-23 note: function call traverses to find out which child function it needs to call), and modifying the received request, wherein in the modified request the least one device independent class has been translated to the at least one device specific class (See page 5 lines 5-9 method is called in terms of parent and is translated then executed with respect to the child class).

While Polymorphism does not differ substantially from the claimed invention the disclosure a proxy, and of wherein the class hierarchy database stores a class hierarchy and associations between classes; generating a device specific request in a device specific language; sending the device specific request in the device specific language to a managed device coupled to the proxy, wherein the proxy is a

computational device, (i) in the class hierarchy database, a first base class at a higher level in the class hierarchy is connected to a second base class and a third base class that are at a lower level in the class hierarchy, wherein the second and third base classes are connected via a base association; (ii) in the class hierarchy database, the second base class is connected to a first specific class that corresponds to the first base class, the third base class is connected to a second specific class that corresponds to the second base class, wherein the first specific class and the second specific class are connected by a specific association; (iii) in response to a request for specific association instances based on providing a source class corresponding to the second base class and a requested class corresponding to the third base class, deriving one class supported by the managed device via the specific association., is not necessarily explicit. Wang however, does disclose

wherein the class hierarchy database stores a class hierarchy and associations between classes (See column 5 lines 1-6) and generating a device specific request in a device specific language; sending the device specific request in the device specific language to a managed device (See column 5 lines 10-20 note: CIM only defines base classes ). (i) in the class hierarchy database, a first base class at a higher level in the class hierarchy is connected to a second base class and a third base class that are at a lower level in the class hierarchy, wherein the second and third base classes are connected via a base association; (ii) in the class hierarchy database, the second base class is connected to a first specific class that corresponds to the first base class, the

third base class is connected to a second specific class that corresponds to the second base class, wherein the first specific class and the second specific class are connected by a specific association; (iii) in response to a request for specific association instances based on providing a source class corresponding to the second base class and a requested class corresponding to the third base class, deriving one class supported by the managed device via the specific association (See column 7 lines 1-15 and lines 61-67). It would have been obvious to an artisan of ordinary skill in the pertinent art at the time the invention was made to have incorporated the teaching of Polymorphism into the system of Wang. The modification would have been obvious because the two references are concerned with the solution to problem object and device encapsulation, therefore there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan, would have been motivated to combine the cited references since Wang teaching incorporates the principals of polymorphism.

As for claim 2 the rejection of claim 1 is incorporated, and further Wang discloses: mapping at least one device independent class attribute to at least one device specific class attribute in the modified request (See column 8 lines 35-40); mapping at least one device independent property to at least one device specific property in the modified request; generating a device specific request from the modified request (See column 8 lines 40-45), in response to mapping the at least one device

independent class attribute and the at least one device independent property; and sending the device specific request to a managed device (See column 8 lines 30-35).

As for claim 3, the rejection of claim 1 is incorporated, and further Wang discloses: modifying the received request to include at least one association between device specific classes in the class hierarchy (See column 9 lines 30-40).

As for claim 4, the rejection of claim 1 is incorporated, and further Polymorphism discloses: wherein the received request indicates a source class and a requested class, the operations further comprising (See page 6 note: and child request is made to functions from the parent class): determining a specific association between a first device specific class that corresponds to the source class and a second device specific class that corresponds to the specific class (See page 5 paragraph 2). While Wang discloses: wherein the specific association corresponds to a managed device (See column 7 lines 1-5).

As for claim 5, the rejection of claim 4 is incorporated, and further Wang discloses: wherein the source class represents storage pools and the requested class represents storage volumes corresponding to a storage pool (See column 3 lines 47-50).

As for claim 6, the rejection of claim 1 is incorporated, and further Wang discloses: determining a first device specific class from the class hierarchy database,

wherein the first device specific class has a specific association with a second device specific class that corresponds to the indicated source class, and wherein the specific association corresponds to the base association (See column 5 lines 1-10).

As for claim 8, the rejection of claim 1 is incorporated, and further Wang discloses: wherein the request is received from a Common Information Model application, and wherein the at least one device independent class is specified by a Common Information Model schema (See column 5 lines 1-7).

As for claim 9, the rejection of claim 1 is incorporated, and further Wang discloses: a command that is part of an object oriented management schema for managing non-homogeneous devices in a network environment (See column 5 lines 1-10).

As for claim 10, the rejection of claim 9 is incorporated, and further Wang discloses: wherein the management schema comprises the Common Information Model (See column 5 lines 1-10).

Claims 11-16, 18-20 are method claims corresponding to article of manufacture claims 1-6, 8-10 respectively and are thus rejected for the same reasons as set forth in the rejection of claim 1-6, 8-10.



As for claim 34 the rejection of claim 11 is incorporated and further Wang discloses: wherein the managed device is coupled to a proxy, wherein the proxy is a computational device, and wherein the receiving, the traversing, the modifying and the generating are performed by the proxy (See column 5 lines 50-60).

### **Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*LJH*  
*Leon J. Harper*  
*September 16, 2008*

/Khanh B. Pham/  
Primary Examiner, Art Unit 2166